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UNIVERSITY OF CALIFORNIA

DONNER LABORATORY AND DONNER PAVILION
BERKELEY 4, CALIFORNIA

May 2 1963

Dear Dr.Meyer,

I received the pipet, the serum samples and the data on your subjects. I have distilled the serum, and when our new scintillation counter is set up I will count the water samples and send you the results. I had all the water samples monitered in Donner Lab's whole body counter just to make sure they were not contaminated with Cr^{51}.

As far as I can determine, Will hasn't done any work on the relationship between blood volume and lean body mass in the four years that I have worked for him. Nor can I find anything published by anyone at Donner Lab on this subject.

The most recent article that I know of is by F.P.Muldowney of Harvard Med. School in "Techniques for measuring body composition" p 212. I enclose the title page of this publication so you can look it up. Muldowney gives the linear regression of red cell mass(y) on lean body mass (x) as

$$y = 32.74x + 155.17$$

Is this the formula that you are looking for?

Dr. Howard Parker the Associate Research Physician at Donner said that about 8 years ago, Will and others tried expressing blood volume in terms of cc/gm of lean body wt. rather than cc/ gm of total body wt. Theoretic-ally this should have produced a better correlation, but after trying a couple of hundred patients this way, the researchers decided to go back to the old method. The Clinic still uses the old method.

I will send you the water volumes, the Kgs o of fat and the lean body mass on your subjects as soon as possible. I will also send you my calculations for your file.

We were not able to establish radio contact as we had hoped, so we have no news that is not in the newspaper. The mail service has also been very poor and we have had only one letter from Will. All he said was that some of the scientific equipment has broken down and this is spoiling some of the planned research.

Sincerely
Rosemary Hughes
Rosemary Hughes

P.S. Please forgive the typing..I'm no typist, just a hunt and pecker.